

Notice of Allowability

Application No.

10/689,974

Examiner

Thor S. Campbell

Applicant(s)

WIECZOREK ET AL.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-14.
3. ☒ The drawings filed on 21 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 10/21/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date ____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James Durlacher on 5/17/04.

The application has been amended as follows:

In the Specification:

Paragraph 3 has been replaced with the following:

Referring now to FIG. 2, the inside surface 30 of bore 22 defines a notch 31 according to the present invention. Notch 31 opens into bore 22 and has a circumferential extent of not more than 90° relative to said heater receiving bore and cooperates with an oblong protrusion 32 that is constructed and arranged as part of the fuel heater 21, according to the present invention, to facilitate removal of fuel heater 21 from the bore 22 of housing 23, by a camming action.

Paragraph 4 has been replaced with the following:

Fuel heater 21 is illustrated in FIG. 3 and the protrusion 32 is illustrated in enlarged detail in FIG. 4. It is intended for fuel heater 21 to be considered as a conventional fuel heater as far as its general shape, mechanical structure, and its electrical construction and properties. The only modification of this otherwise

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conventional fuel heater 21 is the addition of protrusion 32. Protrusion 32 extends axially along a line that is parallel with the longitudinal axis of the fuel heater 21 and has a circumferential extent of not more than 90° relative to said fuel heater body. Fuel heater 21 includes mounting flange 26 and an O-ring seal 33 that is positioned around fuel heater 21 at a location along the length of fuel heater 21 so as to establish a liquid-tight interface between fuel heater 21 and the separator housing 23.

In the claims:

Claim 1 has been replaced by the following:

1. (Amended) In combination: a fuel filter housing defining a heater-receiving bore and a notch opening into said heater-receiving bore, said notch having a ramp portion, and having a circumferential extent of not more than 90° relative to said heater receiving bore; and a fuel heater constructed and arranged for inserting into said heater-receiving bore, said fuel heater including a protrusion that is constructed and arranged for engaging said notch, wherein turning said fuel heater causes said protrusion to cooperate with said ramp portion to facilitate removal of the fuel heater from the heater-receiving bore.

Claim 12 has been replaced by the following:

12. (Amended) A fuel heater for assembly into a fuel filter housing bore comprises: a longitudinal body having a heating tip at one end and oppositely disposed at another end an electrical connector; and a generally oblong protrusion

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constructed and arranged as part of said longitudinal body for fitting into said fuel filter housing, wherein said generally oblong protrusion has a circumferential extent of not more than 90° relative to said longitudinal body, and cooperates with said fuel filter housing to facilitate removal of the fuel heater from the fuel filter housing.

Claim 14 had been replaced by the following:

14. (Amended) In combination: a housing member defining a receiving bore and a notch opening into said receiving bore, said notch having a ramp portion, and having a circumferential extent of not more than 90° relative to said heater receiving bore; and an insert component constructed and arranged for inserting into said receiving bore, said insert component including a protrusion that is constructed and arranged for engaging said notch, said protrusion extending axially along a line that is parallel with the longitudinal axis of the insert component, wherein turning said insert component causes said protrusion to cooperate with said ramp portion to facilitate removal of said insert component from the receiving bore, by a camming action.

Allowable Subject Matter

Claims 1-14 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach to one of ordinary skill in the art, in combination with the other limitations of the independent claims, a housing member defining a receiving bore and a notch opening into said receiving bore; and an inserted component including a protrusion

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that is constructed and arranged for engaging said notch, wherein turning said insert component causes said protrusion to cooperate with said ramp portion to facilitate removal of said insert component from the receiving bore, by a camming action. In particular, the prior art does not teach the combination of a fuel filter and fuel heater having the above described means of connecting.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Roesgen (US 6493508) and Groezinger et al. (US 4719012) teach aspects of the instant invention but do not teach the combination as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

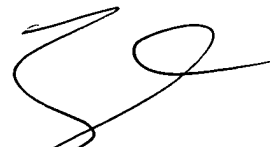
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thor S. Campbell whose telephone number is 703-306-9042. The examiner can normally be reached on Tue-Fri 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Pothier can be reached on 703-308-0265. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TSC
5/17/04



**THOR CAMPBELL
PATENT EXAMINER**